The Impact of Regulatory Reforms on the Earnings Forecasting Behaviour of IPO Firms

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Abstract

Purpose – This paper jointly assesses the impact of regulatory reform for corporate fundraising in Australia (*CLERP Act* 1999) and the relaxation of ASX admission rules in 1999, on the accuracy of management earnings forecasts in initial public offer (IPO) prospectuses. The relaxation of ASX listing rules permitted a new category of new economy firms (commitments test entities (CTEs)) to list without a prior history of profitability, while the *CLERP Act* (introduced in 2000) was accompanied by tighter disclosure obligations and stronger enforcement action by the corporate regulator (ASIC).

Design/methodology/approach – All IPO earnings forecasts in prospectuses lodged between 1998 and 2003 are examined to assess the pre- and post-*CLERP Act* impact. Based on active ASIC enforcement action in the post-reform period, IPO firms are hypothesised to provide more accurate forecasts, particularly CTE firms, which are less likely to have a reasonable basis for forecasting. Research models are developed to empirically test the impact of the reforms on CTE and non-CTE IPO firms.

Findings – The new regulatory environment has had a positive impact on management forecasting behaviour. In the post-*CLERP Act* period, the accuracy of prospectus forecasts and their revisions significantly improved and, as expected, the results are primarily driven by CTE firms. However, the majority of prospectus forecasts continue to be materially inaccurate.

Originality/value – The results highlight the need to control for both the changing nature of listed firms and the level of enforcement action when examining responses to regulatory changes to corporate fundraising activities.

Keywords - Initial Public Offerings; Prospectus Forecasts, Management Earnings Forecasts, Continuous Disclosure, Commitments Test Entities, Regulation

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1. Introduction

Around the turn of the century, major changes occurred in Australian corporate fundraising and continuous disclosure regulations, accompanied by increases in their level of enforcement. These changes included tighter guidelines for disclosing earnings forecasts in prospectuses, and increases in sanctions for continuous disclosure contraventions brought about by the various stages of the Corporate Law Economic Reform Program (CLERP). Following these changes there were significant increases in the level of prospectus stop orders issued by Australian Securities and Investments Commission (ASIC), the introduction of criminal penalties, and on-the-spot fines imposed by the ASIC. The nature of firms listing on the Australian Securities Exchange (ASX)[1] also changed with the amendment to ASX Listing Rule 1.3.2(b) in 1999, which allows a certain category of firms to list without a prior history of profitability (commitments test entities (CTEs)). To address the fact that most CTE firms are smaller and riskier than other listed entities, the ASX introduced ASX Listing Rule 4.7B, which generally requires CTEs to submit quarterly cash flows reports for at least two years after initial listing. These firms are therefore likely to be significantly different in their disclosure behaviour than more traditional initial public offer (IPO) firms that listed prior to 1999.

Information disclosed in IPO prospectuses about future earnings expectations is considered highly relevant in informing investors about investments in new share issues. However, doubts about the reliability of such information are an ongoing concern of regulators in Australia and in other countries. Prior research suggests such concerns are justified with most Australian studies finding earnings forecasts contained in IPO prospectuses tend to be highly inaccurate (Lee, Taylor, Yee and Yee 1993; Hartnett and Romcke 2000; Gallery, Gallery and Ryan 2002; Chapple, Clarkson and Peters 2005). However, apart from Chapple et al. (2005), researchers have not examined the earnings forecasting behaviour of IPO firms in Australia's more recent regulatory environment. Chapple et al. (2005) find that the quantity of IPO earnings forecasts declined post-*CLERP Act* (1999), but found no evidence of a change in forecast quality as measured by forecast accuracy (error and bias). They attribute their findings to a reduction in litigation risk associated with fundraising regulatory changes in 2000 and suggest that their results "confirm previous findings that changes in litigation risk affect the level but not the quality of disclosure" (p.67). However, Chapple et al. (2005) do not control for other changes that could have contributed to changes in forecasting behaviour,

particularly the change in the nature of IPO firms (the admission of CTE companies to ASX listing) that occurred concurrently with the CLERP reforms.

We therefore extend the Chapple et al. (2005) study by re-examining IPO forecasting behaviour of firms listed on the ASX between January 1998 and December 2003 – a similar study period to Chapple et al. (2005), but extended by one year. Similar to Chapple et al. (2005), we expect that IPO forecasting frequency has declined post-*CLERP Act*, but in contrast to their findings, we expect the quality of forecasting (as measured by the accuracy of prospectus forecasts and their revisions) to have *improved* in the later time period after controlling for CTE firms. Furthermore, we expect that CTE firms are the main contributors to the changing forecasting behaviour due to their closer scrutiny by the ASX and ASIC in the post-reform period. In contrast to Chapple et al. (2005), our expectations are premised on an increase in regulatory enforcement over the post-*CLERP Act* period leading to an *increase* in litigation risk rather than a decrease in litigation risk.

Consistent with these expectations, our results show that regulatory changes and increased enforcement in the post-*CLERP Act* period have been effective in increasing the accuracy of prospectus earnings forecasts. Additionally, we find a noticeable improvement in the accuracy of revisions (the final forecast updates prior to the actual earnings announcement date).[2] Our results reveal that the observed improvement in forecasting behaviour is primarily driven by the CTE IPO firms rather than the traditional, non-CTE IPO firms. Importantly, these results highlight the need to control for both the changing nature of listed firms and the level of enforcement action when examining the responses to regulatory change.

The remainder of the paper is organised as follows. Section 2 provides an overview of the Australian corporate fundraising and continuous disclosure regulations as well as extant literature on the determinants of disclosure, the prospectus earnings forecast properties of IPO firms and the quality of management earnings forecast disclosures. Section 3 outlines the relevant theory and develops hypotheses, while Section 4 discusses the research design utilised to test these hypotheses. Section 5 presents an analysis of the data and the results of hypotheses testing. Finally, Section 6 summarises the findings and implications of the study.

2. Overview of regulatory changes

Commencing in 1999, a series of wide-ranging changes were made to Australian corporate regulations, supported by an increase in their enforcement by the ASIC and ASX. Among those changes were new and amended provisions under legislation and ASX Listing Rules which directly impacted corporate fundraisings activities and disclosure obligations of IPO firms. The key changes relate to fundraising regulations under the *Corporations Act*, admission to listing under the ASX Listing Rules, and the application and enforcement of continuous disclosure provisions under both the *Corporations Act* and ASX Listing Rules. A summary of these changes is presented in Table 1 and discussed below.

[Insert Table 1 here]

2.1 Corporations Act - Fundraising Regulations

The *Corporate Law Economic Reform Program (CLERP) Act* 1999 (Cth) commenced on 13 March 2000 and revised corporate fundraising regulation by introducing a single liability regime for inaccurate prospectuses. Prior to the Act, liability in relation to misleading forecasts in prospectuses arose through competing regimes. The (then) *Corporations Law* s995 and s996 prohibited false or misleading statements in, or omissions from, prospectuses, and s1005 governed civil liability where any person suffered loss or damage as a result of the contravention. An overlap of liability can arise under misleading and deceptive conduct (s52) through the *Trade Practices Act* 1974 (Cth), which has wider application than s995 of the *Corporations Law*. Additionally, the common law remedy of contractual misrepresentation applies.

Australian fundraising regulation is now largely contained in Chapter 6D of the *Corporations Act* 2001,[3] including provisions governing the contents of disclosure documents, the procedures for offering securities, disclosure document advertising, and remedies for investors who acquired securities under a defective disclosure document. Issues relating to disclosure in prospectuses are governed by Part 6D.2, Div 3 and 4. Specifically, s710 provides a general test requiring the disclosure of all the information that investors and their professional advisers would reasonably require, whereas s711 provides for specific disclosures[4]. False or misleading statements in, or omissions from, prospectuses are prohibited under s728, with s728(2) requiring earnings forecasts to be based on reasonable

grounds. A breach of s728 will give rise to criminal liability under s728(3) and civil proceedings under s729(1). Those potentially liable are the issuer, directors and proposed directors, underwriters, and certain experts and advisors. Defenses to both criminal and civil liability are contained in ss731–733, whereas remedies for investors are contained in s737-738.

The *CLERP Act* removed the requirement for prospectuses to be registered with ASIC. Prospectuses need only to be lodged with ASIC. Following lodgement the company must observe a seven-day exposure period to allow the market a chance to review the prospectus (prior to its official public "issue"). During this period, subscriptions cannot be accepted. Part 6D.4 of the *Corporations Act* governs ASIC's powers, among which s739 gives ASIC the power to issue a stop order on a company's prospectus if it believes that s728 has been breached. ASIC also requires the lodgement of a supplementary prospectus in the event that a company's forecast changes significantly between the issue of the initial prospectus and listing. However, the issue as to whether managers subsequently correct materially inaccurate prospectus forecasts once listed on the ASX is caught by the continuous disclosure regulations (discussed below).

In response to concerns about "blue sky" forecasts, ASIC released Information Memorandum (IR 01/05) in February 2001 advising of tighter guidelines governing financial forecasts and projections in prospectuses. These guidelines form the basis of Policy Statement PS170: *Prospective Financial Information*, replacing Practice Note PN67: *Financial Forecasts in Prospectuses* in September 2002, with some significant changes. PN67 did not set out when prospective financial information[5] (forecasts) must be included in the prospectus but simply left it to the judgement of company directors to assess the need on a case-by-case basis (67.2). In contrast, PS 170 provides provisions on when forecasts can or should be disclosed (170.2, 170.4-170.15) and provides a general test of whether forecasts must be disclosed (170.13). While both PN67 and PS170 state that forecasts must not be included unless they are based on "reasonable grounds",[6] PS170 provides a range of indicative factors as to what are reasonable grounds for disclosing forecasts (170.16-170.50).

2.2 Changes to ASX Admission Rules

During the late 1990s, some securities exchanges relaxed their listing rules to facilitate capital raisings for emerging 'new economy' companies. Most notably, amendments to the

NASDAQ Listing Standards in 1997 permitted listing of firms which had no prior history of profitability. In contrast, at that time the New York Stock Exchange (NYSE) required all firms to show three years of profitability prior to listing (Klein and Mohanram 2005).[7]

Prior to September 1999, all Australian firms seeking listing on the ASX were required to have either a history of profitability[8] or net tangible assets of at least $2 million, with no more than half of total assets in cash (or in a form readily convertible to cash). If the firm held more than fifty percent of total assets in cash, it had to have binding contracts in place to reduce the balance to less than half (former LR 1.3.2(b)). As the profitability, assets and binding contracts tests precluded many new economy firms from listing, the ASX replaced the 'binding contracts' requirement with a 'commitments test'. From September 1999 firms which do not have a history of profitability and have cash holdings of more than fifty percent of total assets at listing date, are required to have commitments in place to spend the cash (and cash equivalents) in a way which is consistent with the firms' business objectives (LR 1.3.2(b)). "The change from binding contracts to commitments facilitated the admission of smaller entities with developing businesses based on new technology or other intellectual property assets" (ASX 2002, p.2).

Although these 'commitments test entities' (CTEs) are listed on the ASX,[9] they are not admitted on the same basis as other ASX-listed companies. CTEs are subject to the same general periodic reporting and disclosure rules, but in addition, are required to make a statement in the two annual financial reports following listing regarding whether they used the cash available at listing in a manner consistent with their business objectives (LR4.10.19). More onerously, CTEs are required under LR 4.7B to lodge quarterly cash flow (QCF) reports for at least two years[10] after listing because less frequent reporting is considered inadequate in meeting the market's information needs about such entities (ASX 2002). The ASX (2002, p.2) "considered that there are similarities between the position of a mining exploration entity and an entity admitted on the basis of a developing business" and accordingly, for both types of entities, "information in relation to expenditures, and cash flow generally, assists the market to understand the extent to which the entity is achieving its goals."[11] The requirement for CTEs to report quarterly cash flows suggests the ASX considers the nature of risks associated with such entities is similar to mining exploration companies, and different from all other ASX-listed entities.

2.3 ASIC/ASX Joint Continuous Disclosure Surveillance Program

The introduction of ASX Listing Rule 4.7B coincides with the launch of the ASIC/ASX joint continuous disclosure surveillance program.[12] Continuous disclosure provisions are contained in the ASX Listing Rules and the *Corporations Act*. Principle 5 of the ASX Rules states that "timely disclosure must be made of information which may affect security values or influence investment decisions, and information in which security holders, investors and ASX have a legitimate interest". Furthermore, ASX Listing Rule 3.1 states that "once an entity is or becomes aware of any information concerning it that a reasonable person would expect to have a material effect on the price or value of the entity's securities, the entity must immediately tell ASX that information." Listing Rule 3.1A provides exceptions to Listing Rule 3.1.[13] Chapter 6CA[14] of the *Corporations Act* provides statutory backing to ASX Listing Rule 3.1. A contravention of the LR 3.1 is also a contravention of s674 (2) of the *Corporations Act*, which may give rise to both criminal and civil penalties.

In its media release on 1 February 2000, ASIC emphasised that, "because the surveillance program will target companies in market sectors with high trading volatility, it will inevitably focus on small mining and high technology companies". Based on the results of Gallery, Gallery and Sidhu (2004), 62.3% of CTE reporting firms fit into this definition. Most CTE reporting firms are also small-sized and have negative recurring operating cash flows (and thus are loss making), making them obvious targets for the joint surveillance program.

The ASX's and ASIC's concerns about CTE firms would appear to be justified, given that Klein and Mohanram (2005) find US IPO firms entering the market during the high-tech bubble exhibited significantly greater return volatility and performed substantially worse both in terms of financial performance, stock return performance as well as involuntary delisting, compared to firms that listed under the profitability standard. Consistent with these US findings, Gallery et al. (2004) report that in Australia the success rate of CTE firms has been very low, with more than 70% of these firms failing to achieve positive operating cash flows, leading to a continuation of quarterly cash flow reporting for more than eight quarters.

In September 2001, the ASX issued amendments to Listing Rule 3.1 relating to continuous disclosure requirements, and reissued the associated Guidance Note 8. The changes again demonstrate the additional emphasis on the need for companies to keep the market fully

informed. Among the amendments are requirements for companies to respond to media comments or market speculation when they are not reflective of the company's own expectations. Guidance Note 8 specifically suggests that a company must make immediate disclosure to the market when it becomes aware that actual revenues and profits will materially differ from the financial results for the previous corresponding period, or forecast projections contained in any prospectus, or projections and indications previously provided to the market in relation to the financial period, or consensus estimates made by analysts.

In summary, Australian corporate fundraising and continuous disclosure regulations and their level of enforcement have undergone major changes since 2000. These changes are expected to have improved the practices of Australian firms with regard to fundraising and continuous disclosure through significant increases in the level of prospectus stop orders, tighter guidelines for disclosing earnings forecasts in prospectuses, higher levels of scrutiny placed on CTE firms, clarification of Listing Rule 3.1, and increases in sanctions for continuous disclosure contraventions, including the introduction of criminal penalties and ASIC's on-the-spot fines.

3. Prior research and hypotheses development

It is well established that managers weigh the costs against the benefits in deciding whether to voluntarily disclose information to the market (Verrecchia 1983). When seeking external capital, firms have strong incentives to increase their level of voluntary disclosure to reduce their cost of capital (Hutton, and Palepu 1999; Lang and Lundholm 2000). However, potential litigation and/or reputation costs arising from inaccurate disclosure to investors can deter managers from providing detailed forward-looking disclosures in prospectus documents and accompanying announcements. In the U.S., securities laws and the threat of private litigation have traditionally discouraged the inclusion of earnings forecasts and other forward-looking information in prospectus documents (Hazen 1996). In contrast, outside the U.S., where litigation risk is significantly lower, earnings forecasts are frequently provided in fundraising documents. The lower level of litigation risk also appears to lead to an increase in earnings forecast revisions which are less biased towards bad news.[15]

3.1 Frequency of Earnings Forecasts in IPO Prospectuses

Consistent with a lower litigation environment, early Australian IPO research reveals that earnings forecasts were disclosed in approximately 75 to 85 % of IPO prospectuses (Cheung, Lee, and Taylor 2000; How and Yeo 2001). However, the study by Chapple et al. (2005) reports that the proportion of IPO prospectuses disclosing earnings forecasts has declined considerably from 79% in the period of 1998-2000 to 59% in 2000-2002. Chapple et al. (2005, p. 69) attribute this decline to "the reduction in the litigation risk associated with initial public offering prospectus disclosure" arising from changes introduced by the *Corporate Law Economic Reform Program Act* 1999 (Cth) with respect to corporate fundraising activities. It could alternatively be argued that given the increase in regulatory enforcement post-*CLERP Act*, litigation risk is likely to have increased the costs of forecasting.[16]

3.2 Prospectus Earnings Forecasts Accuracy (pre-CLERP Act)

Prior to the introduction of the *CLERP Act* on13 March 2000, the lower level of litigation risk in Australia was evident in the lack of accuracy in prospectus forecasts and subsequent revisions. Lee, Taylor, Yee and Yee (1993) examine a sample of Australian industrial IPOs between 1976 and 1989 and report a median absolute forecast error of 42.5%. They propose that these errors may be attributable to a firm's age, size, forecast interval[17] and growth prospects. Of these, the forecasting interval is found to be significantly and positively related to forecast error. Extending the findings of Lee et al. (1993), Hartnett and Romcke (2000) investigate 134 IPO firms from 1991 to 1996 and find that IPO prospectuses still have large forecast errors, with only 40% of forecasts falling within 10% of the actual earnings result. They report strong associations between forecast error and float motive, audit quality, and unanticipated industry activity. In a later study, Gallery, Gallery, and Ryan (2002) report an improved median absolute forecast error of 32.6% when examining 110 IPO prospectuses from 1994 to 1997. However, Chapple et al. (2005), who investigate 214 IPO prospectuses from 1998 to 2002, find that the median absolute forecast error has increased to 38.1% relative to prior studies, but not over their study period. Forecast error is found to be positively associated with forecast horizon and firms with higher growth prospects, and negatively associated with firm size, auditor quality, and the employment of an underwriter to the IPO.

3.3 Prospectus Earnings Forecasts Accuracy (post-CLERP Act)

Chapple et al. (2005) argue that the *CLERP Act* has effectively reduced litigation risk by giving issuers a clearer sense of their potential legal liability with regard to prospectus forecasts, and by reducing ASIC's scrutiny of prospectuses. However, as previously discussed, ASIC indicated that following enactment of the *CLERP Ac*t it would increase its prospectuses surveillance and "significantly increase" the frequency of stop orders (ASIC 2000). Under s739 of the *Corporations Act* (and the old *Corporations Law*), ASIC has the power to issue interim or final stop orders when it finds defects in prospectuses. Both forms of stop orders are likely to be costly to new issuers. Interim stop orders are temporary suspensions that prevent the company from issuing further securities until they release a supplementary prospectus to correct the initial defects, whereas final stop orders are issued when the company fails to provide a supplementary prospectus. A final stop order means the capital raising is terminated indefinitely.

Importantly, problems relating to financial forecasts and their assumptions have been the most common reason for stop orders. Figure 1 shows the trend in stop orders issued by ASIC over the period 1998 to 2003. The high frequencies of prospectuses issued in 1999 and 2000 reflect the 'dot com' boom and the introduction of CTEs by ASX Listing Rule 4.10.19. The graph clearly shows that the number of stop orders (as a proportion of the total number of prospectuses issued per year) increased sharply after the year 2000 (as foreshadowed by ASIC), indicating a dramatic increase in the scrutiny of prospectuses by ASIC.

[Insert Figure 1 here]

Subsequent to the enactment of the *CLERP Act*, the associated regulatory changes and increases in surveillance and enforcement action are expected to have increased the cost of providing misleading forecasts, resulting in a positive impact on the accuracy of earnings forecasts contained in IPO prospectuses. ASIC's Information Memorandum IR01/05 especially tightens the grounds for establishing a reasonable basis on which IPO firms make financial forecasts in prospectuses. Given these tighter guidelines and the increased surveillance and enforcement activities by ASIC and the ASX (particularly with respect to CTE firms), an expected outcome is a reduction in the number of prospectuses containing forecasts, and where they are provided, an increase in their accuracy (a reduction in error and bias). Hence the following are hypothesised:

H1a: The accuracy of IPO prospectus earnings forecasts increased subsequent to the implementation of the *CLERP Act* on 13 March 2000.

H1b: The accuracy of IPO prospectus earnings forecasts increased more for CTE issuers than for non-CTE IPO issuers subsequent to the implementation of the *CLERP Act* on 13 March 2000.

3.4 Accuracy of Prospectus Forecast Corrections

Similar to prospectus earnings forecasts, the accuracy of the forecast revisions are also expected to improve along with the increases in the enforcement of the continuous disclosure regulations. In Australia's continuous disclosure environment an IPO firm has an unambiguous obligation to update a prospectus forecast as the probability of achieving the forecast becomes less likely (Gallery, Gallery and Ryan 2002). Full compliance may require the firm to release a number of pre-earnings announcement updates to the ASX as earnings certainty increase. Where more than one prospectus forecast update is issued in the forecast horizon subsequent to listing, the last forecast (the 'final prospectus forecast update') issued by the firm would be expected to be more accurate in the post-*CLERP Act* period given the increased level of regulatory enforcement in that later period. In particular, the greater uncertainly faced by CTE firms is expected to have led to a greater increase in update forecast accuracy for these firms than for non-CTE firms. These arguments lead to the following hypotheses:

H2a: The accuracy of final prospectus forecast revisions increased subsequent to the implementation of the *CLERP Act* on 13 March 2000.

H2b: The accuracy of final prospectus forecast revisions increased more for CTE issuers than for non-CTE IPO issuers subsequent to the implementation of the *CLERP Act* on 13 March 2000.

4. Data and method

4.1 Sample and Data Sources

The sample comprises all IPO firms listed on the ASX from 1998 to 2003 which have earnings forecasts in their prospectuses. Prospectuses are sourced from the *Connect4* New Issues database. Only those issues that can be clearly identified as new listings and having the

necessary earnings forecast and accounting data are included in the sample. The sample selection procedure resulted in a sample of 285 IPO firms and is summarised in Table 2, Panel A. Panel B shows sample firms categorised by year and whether they are CTE or non-CTE firms; noticeably 40% of the sample are CTE firms.

[Insert Table 2 here]

Table 3 shows sample firms by industry categories and whether the IPO was lodged before or after the implementation of the *CLERP Act* (13 March 2000). Industry membership has been found to affect a firm's earnings disclosure behaviour (Kasznik and Lev 1995). In Australian studies, Gallery, Gallery and Gilchrist (2003) and Gallery, Gallery and Ryan (2002) find that firms in the mining, energy and utilities, banking and finance, investment and financial services, and property trust industry categories (i.e., more regulated industries) are less likely to provide pre-emptive disclosures than firms in other industry groups. Hence for the purposes of the analysis, these firms are categorised as a regulated industry group, and the remaining firms are a non-regulated industry group.[18] Table 3 shows that 25% of firms are in the regulated industry category, although there is wide dispersion across individual industries. Collectively, the 'new economy' industries (telecommunications; pharmaceuticals, healthcare and biotechnology; and technology hardware, software and services) account for 35% of the sample IPOs. This is primarily due to the inclusion of CTE firms from 1999 onwards.

[Insert Table 3 here]

A number of firms issue forecasts for more than one financial year; for example, a firm lodging an IPO prospectus at the beginning of 2000 may have earnings forecast for the periods ending June 2000 and June 2001. These forecasts are defined as the first year forecast and the second year forecast respectively. Table 4 shows that sample firms have a minimum forecast year of one and a maximum of three. Altogether, the sample yields a total of 460 firm-year forecasts over the study period; 285 IPO firms included earnings forecasts for only the first reporting year, 154 firms disclosed forecasts for two reporting years, and 21 firms disclosed forecasts for three reporting years.

[Insert Table 4 here]

Prospectus earnings forecast updates were identified and collected through a systematic examination of the ASX announcements for each firm for the periods covered by the prospectus forecasts. ASX announcements were sourced from *SIRCA* and *Aspect/Huntley Financial Signal G* databases. Market capitalisation data were obtained from the Share Price and Price Relatives (SPPR) database.[19] The remaining non-prospectus data were sourced either directly from the *Connect4 Annual Report* or the *Aspect/Huntley DatAnalysis* databases.

4.2 Identification and Classification of Final Prospectus Forecast Revisions

A careful examination of the ASX announcements made by each firm, for each of the forecast period, resulted in a total of 445 disclosures that update (confirm or correct) the prospectus earnings forecasts subsequent to listing and during the forecast horizon. As illustrated in Table 5, 185 first-year prospectus forecasts updates were released from the sample of 285 firms, whereas 241 second-year forecasts were released from the sample of 154 firms, and 19 third-year forecasts released from 21 sample firms. The lower proportion of first-year updates may be explained by the fact that the average forecast horizon for the first year forecasts is considerably shorter than in later years.[20]

[Insert Table 5 here]

All of the 445 prospectus earnings forecast updates are coded according to the nature of the news disclosed in the forecast. Good news refers to updates that are made to confirm or correct the prospectus earnings forecast upwards, whereas bad news refers to updates that correct the prospectus forecast downwards. Only the final forecast revisions in a horizon period are used to test H2. Where no revision is provided subsequent to listing, the prospectus forecast is used as the final forecast.

4.3 Hypothesis Testing Procedures

Following prior research, two measures are used to test H1 (the hypothesised increase in prospectus forecast accuracy). Prospectus forecast error bias (*PFE*) is the relative directional prospectus earnings forecast error, and is calculated as follows:[21]

$$PFE = \frac{(Forecasted\ Earnings - Actual\ Earnings)}{|\ Forecasted\ Earnings\ |}$$

Prospectus forecast error size (*PFESIZE*), the absolute value of *PFE*, measures the magnitude of the prospectus earnings forecast error. OLS regression Model 1 is estimated to test H1a and H1b.

$$PFE_{it} \text{ (or } PFESIZE_{it}) = \alpha + \beta_1 REGYEAR_{it} + \beta_2 CTE_{it} + \beta_3 LNMCAP_{it} + + \beta_4 REGIND_{it} + \beta_5 GROWTH_{it} + \beta_6 SEO_{it} + \beta_7 RET\_OWN_{it} + \beta_8 PYRSEARN_{it} + \beta_9 P\_HOR_{it} + \beta_{10} UWRITER_{it} + \beta_{11} AUDITOR_{it} + \beta_{12} AUDCOM_{it} + \beta_{13} CHAIR_{it} + \beta_{14} INDIR_{it} + \varepsilon_{it} \quad (1)$$

REGYEAR is the first test variable testing whether the changes in regulation and increases in enforcement in the post-*CLERP Act* period had an impact on the properties of prospectus earnings forecasts (H1a). Accordingly, *REGYEAR* is a binary variable coded 1 if the prospectus was lodged on or after 13 March 2000, and 0 otherwise. *CTE* is the second test variable testing the impact of the CTE categorisation on IPO forecasting behaviour (to test H1b). It is a binary variable coded 1 for firms that were admitted to the ASX under the commitments test entity category and 0 otherwise. A significantly negative β_1 coefficient and a significantly positive β_2 coefficient are predicted in accordance with H1a and H1b.

The remaining variables entering Model 1 are controls for other factors that are expected to be associated with the dependent variable. Larger firms have consistently been observed to make more frequent earnings forecast disclosures (Kent and Ung 1997; Brown et al. 1999; Gallery, Gallery and Gilchrist 2003), and to be associated with various properties of earnings forecast disclosures (Baginski and Hassell 1997). Firm size is measured by the natural log of market capitalisation (*LNMCAP)* at the IPO issue date. Firm size is argued to have a negative relation with forecast error as larger firms have greater capacity to absorb the impact of unexpected events, more diverse operations, and more sophisticated forecasting techniques (Chapple et al. 2005; Hartnett and Romcke 2000; Lee et al. 1993). The control variable for industry (*REGIND)* is coded 1 if the IPO firm is in the banking and finance, investment and financial services, property trust and mining industries, and 0 otherwise. Kasznik and Lev (1995) argue that firms in heavily regulated industries are already required to provide a substantial amount of detailed information to regulators and thus have less need to disclose further voluntary earnings information. The classification of regulated industry categories is based on Gallery, Gallery and Gilchrist (2003), who find that firms in the banking and finance, investment and financial services, property trust and mining industries are less predisposed to releasing earnings forecasts compared to firms in other industries.

Forecast error is expected to be positively related to a firm's growth opportunities as a high growth firm may be subject to relatively greater fluctuations in earnings compared to a low growth firm (Chapple et al. 2005; Lee et al. 1993). *GROWTH* is the market value of equity divided by the book value of equity at the issue date. When an IPO firm plans to raise capital shortly after listing, it is more likely to disclose more accurate earnings forecasts in its IPO prospectus in order to send a positive signal to the market. For the same reason, the firm is also more likely to update the market if the prospectus forecast is not likely to be met. Earnings forecasts enhance the ability to attract new capital (Lees 1981) and suggest that capital offerings motivate forecast release (Ruland et al. 1990). *SEO* is a binary variable coded 1 if the firm launched a secondary equity offering during the forecast period and 0 otherwise.

Chapple et al. (2005) argue that the level of retained ownership should be negatively associated with forecast frequency as higher levels of retained ownership reduce the need to signal a firm's quality through disclosure to the market. *RET_OWN* is the proportion of firms' shares held by pre-existing owners after listing. *PYRSEARN* represents the number of prior year earnings disclosed in the prospectus. Earnings volatility is argued to have a negative association with forecast accuracy, frequency, and precision (Waymire 1985; Baginski et al 2002). Following Gallery, Gallery and Ryan (2002), the disclosure of prior years' earnings is employed as a proxy for the firm's level of earnings volatility. Since little information on an IPO firm is publicly available prior to listing, the disclosure of a steady stream of earnings reduces the perceived riskiness of the firm. On the other hand, highly volatile prior earnings will magnify the risk associated with the IPO. Therefore, firms with less volatile historical earnings are more likely to disclose them in their IPO prospectuses.

P_HOR represents the horizon of an earnings forecast and is measured as the number of days from the release of the prospectus forecast to the actual earnings announcement date. Horizon is likely to be positively related to forecast error as firms making longer-term forecasts face greater uncertainties in both the internal and external environments of the firm, thereby reducing the accuracy of the forecast (Lee et al. 1993; Baginski et al. 2002). For the same reason, Baginski et al. (2002) find that longer-horizon forecasts tend to be less precise than shorter-horizon forecasts. *UWRITER* is coded 1 if the IPO was underwritten and 0 otherwise. The involvement of an underwriter in the IPO process is expected to reduce forecast error (Chapple et al. 2005) as the underwriter performs a monitoring role, encouraging the issuer to

forecast accurately in order to maintain the underwriter's reputation. *AUDITOR* is coded 1 if the IPO firm employed a Big-N auditor and 0 otherwise. Clarkson (2000) argues that the employment of a high quality auditor also increases the accuracy of a firm's earnings forecasts. Supporting evidence is provided in Hartnett and Romcke (2000).

The increasing focus on corporate governance is evident in Australia through the forming of the ASX Corporate Governance Council in August 2002, and the release of the ASX Principles of Good Corporate Governance and Best Practice Recommendations in March 2003. As adoption of the governance principles may impact on disclosure behaviour during our study period, governance control variables are included in our model to control for three key governance recommendations contained in those principles: *AUDCOM, INDIR* and *CHAIR*.[22]

AUDCOM is coded 0 if no audit committee exist, 1 if the committee is made up of both executive and non-executive directors, and 2 if the committee consists entirely of non-executive directors. It is expected that firms would have had an increasingly independent audit committee over the study period in the face of increasing public and regulatory pressure. From 1 January 2003, ASX Listing Rule 12.7 requires all listed firms to have an audit committee composed entirely of non-executive directors. In a U.S. study, Karamanou and Vafeas (2005) find that effective audit committees are positively associated with earnings forecast disclosures, which are more accurate (but less precise). *INDIR* represents the proportion of non-executive directors on the board. Again, in the face of increasing public and regulatory pressure on corporate governance practices, the boards of the sample firms are expected to be increasingly independent over the study period. Karamanou and Vafeas (2005) and Ajinkya et al. (2005) find a positive association between this proxy and the frequency of management earnings forecasts. Karamanou and Vafeas (2005) also find the proportion of outside directors on a board is positively related to greater forecast accuracy, yet negatively related to forecast precision. *CHAIR* is coded 0 if a firm's Chief Executive Officer is also its chairman, 1 if the chairman is an executive, and 2 if the chairman is a non-executive director. This variable is employed as another proxy for board independence in conjunction with the *INDIR* proxy. Furthermore, the chairman's address is one of the most common sources of earnings forecast disclosures; hence the chairman's degree of independence may affect the quality of such disclosures.

Model 2 is estimated to test the H2a and H2b prediction of increased accuracy in final prospectus forecast revisions. *FINALFE* is the final forecast error bias or the relative directional error, based on the expected earnings figure given in the last prospectus forecast update issued during the forecast horizon. *FINALFE* is calculated in the same way as *PFE*, but with the 'forecasted earnings' measured using the final forecast update for the period (or using the prospectus forecast if no update is provided in the forecast horizon period subsequent to listing). *FINALFE SIZE* is the magnitude of the final forecast error and is measured by the absolute value of *FINALFE*.

$$FINAL\ FE_{it}\ (or\ FINALFE\_SIZE_{it}) = \alpha + \gamma_1 REGYEAR_{it} + \gamma_2 CTE_{it} + \gamma_3 LNMCAP_{it} + \gamma_4 REGIND_{it} + \gamma_5 GROWTH_{it} + \gamma_6 SEO_{it} + \gamma_7 RET\_OWN_{it} + \gamma_8 PYRSEARN_{it} + \gamma_9 F\_HOR_{it} + \gamma_{10} NEWS_{it} + \gamma_{11} UFC\_TOT_{it} + \gamma_{12} AUDITOR_{it} + \gamma_{13} AUDCOM_{it} + \gamma_{14} CHAIR_{it} + \gamma_{15} INDIR_{it} + \varepsilon_{it} \quad (2)$$

A negative and significant γ_1 coefficient would provide support for the H2a prediction that the final prospectus forecast updates are more accurate in the post-*CLERP Act* period than pre-*CLERP Act*. A significantly positive γ_2 coefficient would provide support for the H2b prediction that the accuracy of final prospectus forecast updates is greater for CTE firms than non-CTE firms.

The control variables in Model 2 are the same as in Model 1[23], except for the additional variables *NEWS* and *UFC_TOT*, and *F_HOR* replacing *P_HOR*. *NEWS* is coded 1 if actual earnings meet or exceed the final prospectus forecast (good news outcome), and 0 otherwise (bad news outcome). Skinner (1994) finds that voluntary management earnings forecasts are more likely to occur during bad news periods (with large negative earnings surprises) and attribute this to the reduction in reputation and litigation costs resulting from the voluntary release of bad earnings news. Gallery, Gallery and Ryan (2002) also find that bad news periods are more likely to be pre-empted by correctional disclosures when compared with good news periods. *UFC_TOT* captures the number of prospectus forecast revisions issued by the firm subsequent to listing and before the earnings realisation date of the related forecast. Firms providing more forecast updates are likely to be motivated to produce more accurate forecasts. *F_HOR* is the number of days from the release of the forecast update to the actual earnings announcement date.

5. Results

5.1 Descriptive Statistics

Table 6, Panel A reports the descriptive statistics for the dependent variables used to test prospectus and final forecast accuracy. The mean and median prospectus forecast bias (*PFE*) are 267.9% and 8.1% respectively, and the mean and median prospectus forecast error (*PFE_SIZE*) are 296.7% and 39.4% respectively. Hence, consistent with prior literature, the overall sample exhibits a significant positive bias, indicating that management are over-optimistic in the preparation of prospectus earnings forecasts. The mean and median final forecast bias (*FINALFE*) are 15.6% and 1.2% respectively, and the mean and median prospectus forecast error size (*FINALFE SIZE*) are 37.5% and 8.1% respectively. These figures show that the forecast accuracy improves significantly after management issues revisions to correct inaccurate prospectus forecasts.

[Insert Table 6 here]

Table 6 Panel B reports descriptive statistics for the independent variables entering the regression models. A number of changes across the sub-periods are evident. The median total number of prospectus forecast updates (*UFC_TOT*) issued by firms increased from an average of just under 1 (0.813) update per forecast period in the pre-*CLERP Act* period to just over 1 (1.063) post-*CLERP Act*. Untabulated results show that the proportion of IPO firms issuing updates to correct their prospectus forecasts has increased from 34% to 38% (this change is statistically significant at the $p<0.01$ level). Managers seem to be more inclined to make corrections in the post-*CLERP Act* period; a behaviour that may be attributable to tighter regulations and the increasingly litigious environment.

Consistent with Chapple et al. (2005), existing owners tend to retain a large proportion of the firm's equity (*RET_OWN*), with retained ownership increasing from 51% pre-*CLERP Act* to 64% post-*CLERP Act*. Independence of audit committees (*AUDCOM*) also increased in the post-*CLERP Act* period with most firms having audit committees that are partly comprised of executive directors pre-*CLERP Act*, while post-*CLERP Act*, the majority of sample IPO firms had audit committees composed of all non-executive directors. This is in line with the increasing scrutiny placed on corporate governance structures in the post-*CLERP Act* period. The proportion of firms in regulated industries (*REGIND*) almost doubled in the post-period

due primarily to new firms entering the banking and finance industry (as shown in Table 3). Furthermore, post-*CLERP Act*, fewer IPO firms had secondary equity offerings (*SEO*) and fewer engaged a Big-N auditor (*AUDITOR*).

From a regulatory perspective, inaccuracies in earnings forecasts contained in prospectuses would generally be problematic only for material forecast errors. We therefore conduct analyses on the extent to which the prospectus forecast errors are material, whether the frequencies of material errors differed in the pre- and post-*CLERP Act* periods, and the extent to which material forecast errors were subsequently updated, using a materiality threshold of 10%. Table 7, Panel A shows that 69%-74% of IPO firms make material prospectus forecast errors and that CTE firms issues a significantly greater proportion of materially inaccurate prospectus forecasts (83%-84%) compared to non-CTE firms (60%-66%). However, there is no evidence of a significant change in material forecast errors across the two sub-periods for either IPO group. Consistent with Table 6, final forecasts are considerably more accurate than the prospectus forecasts, though around half of the firm years still had material forecast errors.

[Insert Table 7 here]

An interesting finding is that the proportion of firms with material final forecast inaccuracies decreased significantly for CTE firms in the post-*CLERP Act* period (from 62% to 46%), while no changes are observed for the non-CTE firms. This result suggests that the regulatory changes and increases in enforcement may have been more effective for CTE firms compared to non-CTE firms. For the firm years where prospectus forecasts turn out to be materially inaccurate, Panel B presents managers' updating behaviour during the forecast period; that is, whether managers issued an update to correct the inaccurate prospectus forecast, issued no update at all, or worse, falsely informed the market that the prospectus forecast will be met. The lack of statistical significance between sub-periods in Panel B indicates similar updating behaviour in the pre- and post-*CLERP Act* periods. Only around 44% of firms (47% and 41% of CTE and non-CTE firms respectively) issued updates to correct materially inaccurate prospectus forecasts, while 41% of firms (44% and 39% CTE and non-CTE) issued no update during the forecast period. Interestingly, approximately 15% of firms issued updates to assure the market that their prospectus forecast will be met when they actually turn out to be materially inaccurate. This figure is even higher for non-CTE firms (20%). The fact that the

proportion of firms issuing false confirmations has not decreased significantly in the post-*CLERP Act* period suggests a need for regulatory attention to this matter by ASIC and ASX.

5.2 Regression Results

5.2.1 Correlation Tests

Prior to conducting tests of the regression models the correlation matrix for the independent variables entering the regression models was examined. As shown in Table 8, the correlation coefficients among the independent variables are within acceptable levels, indicating that multicollinearity is unlikely to pose a problem for interpretation of coefficients in the regression analysis.

[Insert Table 8 here]

5.2.2 Prospectus Forecast Accuracy (H1)

Table 9 presents regression test results for Model 1. Panels A and Panel B display the results of prospectus forecast error bias and size respectively. H1a predicts that the accuracy of IPOs prospectus earnings forecasts is greater in the post-*CLERP Act* period compared to the pre-*CLERP Act* period. Consistent with this expectation, the *REGYEAR* coefficient is significantly negative for all IPO firms. Analysis of the CTE/non-CTE sub-samples shows that this result is driven by CTE firms. Thus, as predicted in H1b, the changes in regulation post-*CLERP Act* have been effective in reducing prospectus forecast error for CTE firms but not for non-CTE firms. This finding shows that the regulatory and enforcement changes in the post-*CLERP Act* period have been effective in reducing information risk associated with investing in these smaller, riskier (CTE) firms by improving the accuracy of their prospectus forecasts.

[Insert Table 9 here]

Further evident in Table 9 are the results for the control variables. The variables *LNMCAP*, *P_HOR*, and *REGIND* are all significant in the expected directions, consistent with prior IPO studies (Lee et al. 1993; Gallery, Gallery and Ryan 2002; Chapple et al. 2005). *SEO* is negatively related to prospectus forecast error, consistent with the expectation that IPO firms looking to raise additional funds shortly after listing will make more accurate prospectus forecast in order to build the market's confidence and reduce the costs of capital in the

secondary equity offering market. In contrast to Chapple et al. (2005), the existence of an IPO underwriter is found to be positively associated with prospectus forecast error bias and size (although this is driven by the CTE sub-sample). Also contrary to expectations, the presence of a more independent chairman (*CHAIR*) (for the CTE sub-sample) and a greater proportion of non-executive directors on a board (for the non-CTE sub-sample) are associated with greater prospectus forecast errors.[24]

5.2.3 Final Forecast Accuracy (H2)

Table 10 reports results of tests of H2a which predicts that the accuracy of the final prospectus forecasts is greater in the post-*CLERP Act* period compared to the pre-*CLERP Act* period, and H2b which predicts that CTE firms final forecast revisions are more accurate than non-CTE firms over these two periods. Panels A and Panel B display the results of final forecast error bias and size respectively. H2a is supported as the *REGYEAR* coefficient is again negative and significant in both Panels. Like the prospectus forecast error, this result is driven by CTE firms as predicted in H2b. This result is not surprising as the significant improvement in the prospectus forecast accuracy of CTE firms in the post-*CLERP Act* period, accompanied by increases in correctional disclosures, are bound to result in a significant improvement in the final forecast accuracy (as it involves a combination of the two factors).

[Insert Table 10 here]

Other significant findings reveal that the *UFC_TOT* coefficient is significant and negative, suggesting that the number of updates issued during the forecast period is negatively related to the final forecast error. This is consistent with expectation since the more revisions a firm makes; the more likely they will be accurate, especially towards the end of the period. Actual earnings outcomes that exceed forecasts (i.e. where *NEWS* = 1) tend to be associated with more accurate forecasts than those that fall short of forecasts and this appears to be driven by non-CTE firms. Contrary to expectation, the significantly positive *SEO* coefficient suggests that non-CTE firms that issue secondary equity offerings during the forecast period are likely to have greater forecast errors.

5.3 Sensitivity Analyses

Several sensitivity tests are undertaken to ensure the robustness of the results to various conditions and alternate specifications of variable constructs. First, the models are tested with

the industry variable, *REGIND*, divided into five industry categories: mining, finance, technology, engineering, and consumer industry groups (with the first four included as dummy variables). Consistent with Chapple et al. (2005), dividing firms into the five industry categories does not change the results of the hypothesis tests, but it takes away the significance of the industry variable (as none of the four dummy variables are significant in any of the regressions).

Second, to control for the fact that some firms have more than one year's forecast in the sample (e.g. some firms provide a forecast for the second and third year) the regressions are estimated only for data corresponding to the first forecast year. Moreover, a control variable is added to each model to control for such firms (1 if the firm has more a one-year forecast in the prospectus and 0 otherwise). The results obtained from these tests do not reveal any significant differences to the main findings previously reported. Third, the robustness of the results to events unique to a particular year is examined by adding year dummy variables (representing each of the years 1999-2003) to the regressions. The results do not reveal any significant differences to the main findings.

Fourth, the results of the regressions after eliminating firm years with prospectus forecast horizon of 30 days or less (10 forecasts in total) and those with final forecast horizon of 30 days or less (17 forecasts in total) from the sample, consistent with Lee et al. (1993). The results from this analysis also reveal no significant differences to the main results. Fifth, a dummy variable is created to distinguish between projections and forecasts as PS 170 requires forecasts to be disclosed only if they are based on reasonable grounds. Projections are based on hypothetical assumptions and not reasonable grounds, thus PS170 (effective September 2002) does not allow for their inclusion whereas the older PN67 does. Therefore, this variable is included in testing for the accuracy of prospectus forecasts. Surprisingly, it is not significant and does not alter the results, other than slightly decreasing the adjusted R^2. Finally, adding a proxy for board size (total number of directors on the board) to each model also does not yield any material differences and actually decreased the adjusted R^2 of some models.

Taken together, the sensitivity tests support the main findings which indicate that regulatory changes and increased enforcement in the post-*CLERP Act* period have effectively improved the prospectus forecast accuracy (H1), and the accuracy of the final forecast (H2). An

important finding is that results for all tests of the regression models demonstrate significant differences in the forecasting behaviour of CTE firms compared to non-CTE firms.

6. Conclusion

This study examines the effects of reforms to the Australian corporate fundraising rules and relaxation of ASX listing rules on the earnings forecast disclosures of Australian IPO firms. In particular, this study investigates whether, in the post-*CLERP Act* period, regulatory changes and enforcement action have improved IPO firms' practices in terms of the accuracy of prospectus earnings forecasts and subsequent forecasts revisions prior to the earnings realisations.

A review of the Australian corporate fundraising and continuous disclosure regulations in section 2 shows that significant changes occurred starting from the year 2000, including significant increases in the level of prospectus stop orders issued by ASIC, the tighter guidelines for disclosing earnings forecasts in prospectuses, and increases in sanctions for continuous disclosure contraventions brought about by the various stages of the Corporate Law Economic Reform Program. The nature of firms listing on the ASX also changed with the admission of commitments test entities (CTEs) to the ASX. Furthermore, because CTEs are primarily high risk companies, the ASX requires additional disclosure from CTEs and other similar high risk entities in the form of compulsory quarterly cash flow reports.

Our study extends the Chapple et al. (2005) findings in that we re-examine the IPO forecasting behaviour over a similar time period (extended by one year), but control for the important and significant change in the types of firms newly listing on the ASX – CTE firms. Like Chapple et al. we expect that IPO forecasting frequency has declined in the post-*CLERP Act* but we expect the quality of forecasting (as measured by forecast accuracy) to have improved in the later time period after controlling for CTE firms. Furthermore, we expect that CTE firms are the main contributors to the changing forecasting behaviour due to their closer scrutiny by the ASX and ASIC. In contrast to Chapple et al., our expectations are premised on an increase in regulatory enforcement over the post-*CLERP Act* period leading to an *increase* in litigation risk rather than a decrease in litigation risk as argued by Chapple et al.

Consistent with our expectations our results show that regulatory changes and increased enforcement in the post-*CLERP Act* period have been effective in improving the accuracy of prospectus earnings forecasts. Additionally we find a noticeable improvement in the accuracy of final forecast revisions prior to the actual earnings announcement date. Importantly, our results reveal that the observed improvement in forecasting behaviour is primarily driven by the CTE IPO firms rather than the traditional, non-CTE IPO firms. However, the finding that 66% (84%) of non-CTE (CTE) IPO firms in the post-*CLERP Act* period continue to make significant material prospectus earnings forecast errors suggests the need for further regulatory scrutiny. A major implication of our findings is the need to control for the distinctively different CTE firms when conducting Australian IPO and disclosure research in the post-*CLERP Act* period.

REFERENCES

Ajinkya, B., Bhojraj, S. and Sengupta, P. (2005), "The association between outside directors, institutional investors and the properties of management earnings forecasts", *Journal of Accounting Research*, Vol. 43 No. 3, pp.343-376.

Australian Securities and Investments Commission (1997), Practice Note 67: *Financial Forecasts in Prospectuses.*

Australian Securities and Investments Commission (1999), "Heard it on the grapevine Draft ASIC guidance and discussion paper", ASIC Media Release (November 1999).

Australian Securities and Investments Commission (2000), "ASIC launches national continuous disclosure surveillance program", ASIC Media Release (February 1, 2000).

Australian Securities and Investments Commission (2001), "ASIC provides guidance for preparers and reviewers of prospective financial information included in disclosure documents", ASIC Information Memorandum IR01/05 (February 7, 2001).

Australian Securities and Investments Commission (2001), "ASIC and ASX act against two high-tech start-ups", ASIC Media Release (July 4, 2001).

Australian Securities and Investments Commission (2002), Policy Statement 170: *Prospective Financial Information*.

Australian Stock Exchange (2003), *ASX Listing Rules and Guidance Notes*.

Australian Stock Exchange Corporate Governance Council (2003), *Principles of Good Corporate Governance and Best Practice Recommendations*.

Baginski, S. P. and Hassell, J. M. (1997), "Determinants of management forecast precision", *The Accounting Review*, Vol. 72 No. 2, pp. 303-312.

Baginski, S. P., Hassell, J. M. and Kimborough M. D. (2002), "The effect of legal environment on voluntary disclosure: Evidence from management earnings forecasts issued in US and Canadian markets", *The Accounting Review* Vol. 77, pp.25-50.

Beekes, W. and Brown, P. (2006), "Do better-governed Australian firms make more informative disclosures?" *Journal of Business Finance and Accounting*, Vol. 33 No. 3-4, pp. 422–50.

Bhattacharya, U. and Daour, H. (2002), "The World Price of Insider Trading", *Journal of Finance*, Vol. 57 No. 1, pp.75-108.

Brown, P., Taylor, S. L. and Walter, T. S. (1999), "The impact of statutory sanctions on the level and information content of voluntary corporate disclosure", *Abacus* Vol. 35, pp. 138-162.

Chapple, L., Clarkson, P. and Peters, C. (2005), "Impact of the *Corporate Law Economic Reform Program Act* 1999 on initial public offering prospectus earnings forecasts". *Accounting and Finance*, Vol. 45, pp. 67-94.

Cheng ,T.Y. and Firth, M. (2000), "An Empirical Analysis of the Bias and Rationality of Profit Forecasts Published in New Issue Prospectuses", *Journal of Business Finance & Accounting*, Vol. 27 No. 3 & 4, pp. 423-446.

Cheung, J., Lee, P. and Taylor, S. (2000), "Impact of changes in the Corporations Law on the accuracy of prospectus earnings forecasts", Working paper, University of Sydney.

Clarkson, P. (2000), "Auditor quality and the accuracy of management earnings forecasts", *Contemporary Accounting Research*, Vol. 17, pp. 595-622.

Corporate Law Economic Reform Program (1997), *Fundraising: Capital Raising Initiatives to Build Enterprise and Employment*, Australian Government Publishing Service, Canberra.

Corporate Law Economic Reform Program (2002), *Corporate disclosure: Strengthening the financial reporting framework*, The Treasury, Commonwealth of Australia.

Corporate Law Economic Reform Program Act 1999 (Cth)

Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Act 2004 (Cth)

Financial Services Reform Act 2001 (Cth)

Gallery, G., Gallery, N. and Gilchrist, C. (2003), "Are Australian corporate disclosures of earnings changes 'continuous' or opportunistic?", Working Paper, Queensland University of Technology.

Gallery, G., Gallery, N. and Ryan, R. (2002), "Do managers correct inaccurate prospectus forecasts?", *Proceedings of the Hawaii International Conference on Business*, June, Honolulu.

Gallery, G., Gallery, N. and Sidhu, B. (2004), "Quarterly cash flow reporting – is it useful?" *JASSA,* Vol. 3, pp. 14-18.

Hartnett, N. A. and J. Romcke. 2000. The predictability of management forecast error: a study of Australian IPO disclosure. *Multinational Finance Journal* 4: 101-132.

Hazen, T. (1996), *The Law of Securities Regulations*, 3rd edn, West Publishing Co, St Paul.

How, J. and Yeo, J. (2001), "The impact of forecast disclosure and its accuracy on equity pricing: The IPO perspective", *Journal of Accounting, Auditing and Finance*, Vol. 16, pp. 401-429.

Karamanou, I. and Vafeas, N. (2005), "The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis", *Journal of Accounting Research*, Vol. 43 No. 3, pp. 453-486.

Kasznik, R. and Lev, B. (1995), "To warn or not to warn: Management disclosures in the face of an earnings surprise", *The Accounting Review*, Vol. 70, pp. 113-134.

Kent, P. and Ung, K. (2003), "Voluntary disclosure of forward-looking earnings information in Australia", *Australian Journal of Management*, Vol. 28, pp. 273-285.

Klein, A. and Mohanram, P. S. (2005), "Why did so many poor-performing firms come to market in the late 1990s?: Nasdaq listing standards and the bubble", Working Paper, University of New York and Columbia Business School.

Lang, M. and Lundholm, R. (2000), "Voluntary disclosure and equity offerings: Reducing information asymmetry or hyping the stock?" *Contemporary Accounting Research*, Vol. 17 No. 4, pp. 623-662.

Lee, P., Taylor, S., Yee, C. and Yee, M. (1993), "Prospectus earnings forecasts: evidence and explanations", *Australian Accounting Review*, Vol. 3, pp.21-32.

Lees, F. A. (1981), "Public Disclosure of Corporate Earnings Forecasts", New York: The Conference Board.

Ruland, W., Tung, S. and George, N. E. (1990), “Factors associated with the disclosure of managers’ forecasts”, *The Accounting Review*, Vol. 65 No. 3, pp. 710-721.

Skinner, D. J. (1994), “Why firms voluntarily disclose bad news”, *Journal of Accounting Research*, Vol. 32, PP. 38-60.

Verrecchia, R. (1983), “Discretionary disclosure”, *Journal of Accounting and Economics*, Vol. 5, pp. 179-194.

Waymire, G. (1985), “Earnings volatility and voluntary management forecast disclosure”, *Journal of Accounting Research*, Vol. 23, pp.268-295.

Figure 1

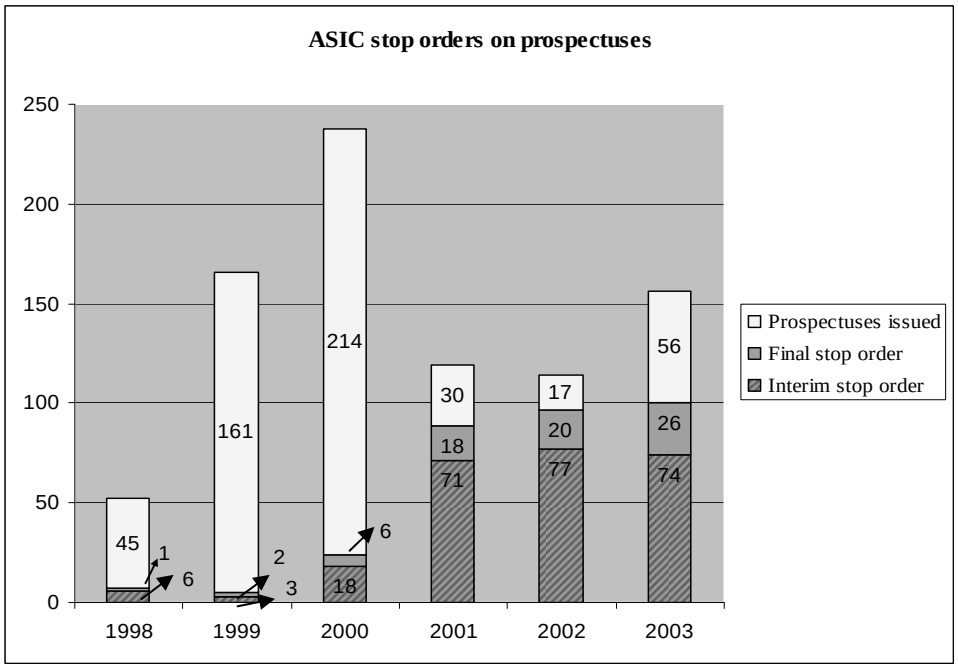

Table 1
Summary of Australian Corporate Regulatory Changes: 1999-2004

1 September 1999	ASX Listing Rule 1.3.2(b) changes asset test from 'binding contracts' to 'commitments' for firms with more than 50% of assets in cash at listing date.
1 November 1999	ASIC releases Draft Guidance - *Heard it on the Grapevine* to raise awareness about continuous disclosure obligations.
1 February 2000	ASIC/ASX joint national continuous disclosure surveillance program is launched.
18 February 2000	ASIC responds to the *CLERP Act* amendments with the following comment: "we will significantly increase the frequency with which we issue stop orders".
13 March 2000	The *Corporate Law Economic Reform Program (CLERP) Act* 1999 (Cth) is enacted.
31 March 2000	ASX Listing Rule 4.7B(a) requires firms newly listing on the ASX under LR 1.3.2(b) (Commitments Test Entities) to lodge quarterly cash flow reports in the Appendix 4C format.
7 February 2001	ASIC Information Memorandum (IR 01/05) advises tighter guidelines governing financial forecasts and projections in prospectuses.
15 July 2001	The *Corporations Act* 2001 (Cth) replaces the *Corporations Law*, accompanied by the ASIC Act 2001.
30 September 2001	ASX amends Listing Rule 3.1 and reissues Guidance Note 8 on continuous disclosure obligations.
11 March 2002	The Financial Services Reform Act 2001 is enacted.
6 September 2002	ASIC replaces Practice Note 67 (Financial Forecasts in Prospectuses) with Policy Statement 170 (Prospective Financial Information).
1 July 2004	The enactment of the Corporate Law Economic Reform Program (Audit Reform and Corporate Disclosure) Act 2004 (CLERP 9).

Table 2
Sample Firms

Panel A: Sample selection procedure	
Initial sample of prospectus identified from *Connect4* Database 1998-2003	846
Less Rights and Entitlements (Non-IPOs) and IPOs subsequently withdrawn	(305)
Less IPO prospectuses with no quantitative forecast data	(252)
Less IPO firms that are delisted before the first forecast is realized	(2)
Less IPO firms with missing data	(2)
Final Sample	285

Panel B: Distribution of CTE firms in the sample

Year[25]	CTE Firms	%	Non-CTE Firms	%
1998	1	3%	32	97%
1999	39	51%	37	49%
2000	57	55%	46	45%
2001	7	37%	12	63%
2002	7	32%	15	68%
2003	4	13%	28	88%
Total	115	40%	170	60%

Table 3
Industry Classification of IPO Firms

GICS Industry Group	**All**		**Pre-*CLERP Act***		**Post-*CLERP Act***	
	N	%	N	%	N	%
Regulated Industries						
Metals & Mining	8	3%	1	1%	7	4%
Oil, Gas & Energy	5	2%	1	1%	4	2%
Infrastructure & Utilities	12	4%	2	2%	10	6%
Banks & Finance	26	9%	1	1%	25	14%
Insurance	3	1%	1	1%	2	1%
Property Trusts	17	6%	11	10%	6	3%
Regulated Industries Subtotal	*71*	*25%*	*17*	*16%*	*54*	*31%*
Non-Regulated Industries						
Developers & Contractors	7	2%	4	4%	3	2%
Building Materials	1	0%	1	1%	0	0%
Food, Beverage & Tobacco	21	7%	9	8%	12	7%
Chemicals	1	0%	0	0%	1	1%
Paper & Forest Products	5	2%	1	1%	4	2%
Retail & Consumer Services	32	11%	15	14%	17	10%
Transportation	4	1%	2	2%	2	1%
Media	17	6%	10	9%	7	4%
Telecommunications	35	12%	17	16%	18	10%
Commercial Services & Supplies	24	8%	8	7%	16	9%
Pharmaceuticals, Healthcare & Biotechnology	18	6%	4	4%	14	8%
Technology Hardware, Software & Services	49	17%	22	20%	27	15%
Non-Regulated Industries Subtotal	*214*	*75%*	*93*	*85%*	*121*	*69%*
Total	285	100%	109	100%	176	100%

Table 4
IPO Firms with Earnings Forecasts

Year	Firms			Total Firm Years
	FY1	FY2	FY3	
1998	33	17	6	56
1999	76	42	2	120
Pre-*CLERP Act* subtotal	109	59	8	176
2000	103	56	7	166
2001	19	13	1	33
2002	22	11	4	37
2003	32	15	1	48
Post-*CLERP Act* subtotal	176	95	13	284
Total	285	154	21	460

FY1 refers to the first year forecast, i.e. the first financial year for which an earnings forecast is made in the prospectus; *FY2* and *FY3* refer to the second and third year forecasts respectively.

Table 5
Frequency of Prospectus Forecast Revisions

Year	FY1	FY2	FY3	Total Updates
1998	18	17	3	38
1999	38	65	2	105
Pre-*CLERP Act* subtotal	56	82	5	143
2000	78	87	5	170
2001	13	27	3	43
2002	12	16	6	34
2003	26	29	0	55
Post-*CLERP Act* subtotal	129	159	14	302
Total	185	241	19	445

FY1 refers to the first year forecast, i.e. the first financial year for which an earnings forecast is made in the prospectus; *FY2* and *FY3* refer to the second and third year forecasts respectively. *Updates* refers to the total number of disclosures issued during the forecast horizon to confirm or correct the prospectus forecasts.

Table 6
Descriptive Statistics

	Overall sample	Pre-*CLERP Act*	Post-*CLERP Act*	t-stat (z-value)
Panel A: Dependent Variables	Mean (Median) *(n=460)*	Mean (Median) *(n=176)*	Mean (Median) *(n=284)*	
PFE (bias)	2.679 (0.081)	4.535 (0.058)	1.529 (0.088)	1.613 (-0.550)
PFE SIZE (error)	2.967 (0.394)	4.716 (0.291)	1.883 (0.421)	1.523 (-0.758)
FINALFE (bias)	0.156 (0.012)	0.071 (0.003)	0.200 (0.015)	-0.467 (-1.418)
FINALFE SIZE (error)	0.375 (0.081)	0.369 (0.101)	0.379 (0.066)	-0.038 (-0.970)
Panel B: Independent Variables	*(n=285)*	*(n=109)*	*(n=176)*	
MCAP ($ million)	231.4 (38.0)	354.9 (35.8)	154.9 (41.2)	1.065 (-0.484)
LNMCAP	17.712 (17.454)	17.676 (17.392)	17.734 (17.534)	-0.333 (-0.484)
GROWTH	3.477 (2.230)	3.634 (2.007)	3.379 (2.251)	0.431 (-0.093)
PYRSEARN (Years)	2.242 (2.000)	2.349 (2.000)	2.176 (2.000)	1.112 (-1.469)
UFC_TOT	0.968 (1.000)	0.813 (1.000)	1.063 (1.000)	-2.411** (-1.888)*
P_HOR (Days)	218 (239)	229 (245)	210 (232)	1.238 (-0.064)
F_HOR (Days)	189 (182)	196 (189)	186 (182)	1.025 (-1.538)
RET_OWN	0.587 (0.641)	0.507 (0.561)	0.637 (0.678)	-4.369*** (-4.577***)
AUDCOM	1.295 (2.000)	1.156 (1.000)	1.381 (2.000)	-2.241** (-2.098**)
CHAIR	1.772 (2.000)	1.752 (2.000)	1.784 (2.000)	-0.484 (-0.926)
INDIR	0.602 (0.600)	0.585 (0.600)	0.612 (0.600)	-1.126 (-1.176)
REGIND	71 (25%)	17 (16%)	54 (31%)	8.189**
CTE	115 (40%)	40 (37%)	75 (43%)	0.979
SEO	91 (32%)	42 (39%)	49 (28%)	3.540*
AUDITOR	176 (62%)	76 (70%)	100 (57%)	4.748**
UWRITER	225 (79%)	89 (82%)	136 (77%)	0.776

*,**,*** significant at the 0.1, 0.05, and 0.01 levels respectively (2-tailed). Pre (Post)-*CLERP Act* includes prospectus lodgements dates up to (on/after) 13 March 2000; *PFE* is the prospectus forecast error bias or the relative directional forecast error, measured as the difference between forecasted earnings in the prospectus and the actual reported earnings, scaled by the absolute value of forecasted earnings; *PFE SIZE* is the prospectus forecast error size, measured as the absolute value of PFE; *FINALFE* is the final forecast error bias or the relative directional final earnings forecast error, based on the expected earnings figure given in the last update issued during the forecast period; *FINALFE SIZE* is the magnitude of the final earnings forecast error and is measured by the absolute value of FINALFE; *MCAP* is the value of market capitalisation at lodgement date and *LNMCAP* is its natural log; *GROWTH* is market value of equity divided by the book value of equity at lodgement date; *PYRSEARN* is the number of prior year earnings disclosed in the prospectus; *UFC_TOT* is the frequency of updates made during the forecast period and is measured by the number of disclosures issued during the forecast period to update (either to confirm or correct) the prospectus forecast; *P_HOR* is the number of days from the release of the prospectus forecast to the actual earnings announcement date; *F_HOR* is the number of days from the release of the forecast update to the actual earnings announcement date. *RET_OWN* is the proportion of shares held by pre-existing owners after listing; *AUDCOM* is coded 0 if no audit committee exists, 1 if the committee is made up of both executive and non-executive directors, or 2 if the committee consists entirely of non-executive directors; *CHAIR* is coded 0 if the chairman is also the firm's CEO, 1 if the chairman is an executive director other than the CEO, or 2 if the chairman is a non-executive director; *INDIR* is the proportion of non-executive directors on the board; *REGIND* is coded 1 for firms in the investment and financial services, banking and finance, property trust and mining industries and 0 otherwise; *CTE* equals to 1 for Commitments Test Entities and 0 otherwise; *SEO* equals to 1 for firms that launched a secondary equity offering during the forecast period and 0 otherwise; *AUDITOR* equals to 1 for firms with a Big-N auditor and 0 otherwise; *UWRITER* equals 1 for firms that employed an underwriter for the IPO and 0 otherwise.

Table 7
Frequencies of Material Prospectus Forecast Errors and Subsequent Updating Behaviour

	All			**CTE firms**			**Non-CTE firms**		
	Pre-*CLERP Act*	Post-*CLERP Act*	Pearson Chi-Square	Pre-*CLERP Act*	Post-*CLERP Act*	Pearson Chi-Square	Pre-*CLERP Act*	Post-*CLERP Act*	Pearson Chi-Square
Panel A: Firm-years with material prospectus forecast errors (errors > 10%)									
N	176	284		66	124		110	160	
Prospectus forecast (%)	121 (69%)	210 (74%)	1.453	55 (83%)	104 (84%)	0.009	66 (60%)	106 (66%)	1.101
Final forecast (%)	88 (50%)	127 (45%)	1.218	41 (62%)	57 (46%)	4.500**	47 (43%)	70 (44%)	0.028
Panel B: Subsequent updating behaviour for firm-years with material prospectus forecast errors									
N	121	210		55	104		66	106	
Corrections (%)	45 (37%)	108 (51%)	0.023	21 (38%)	59 (57%)	1.054	24 (36%)	49 (46%)	0.069
No update (%)	56 (46%)	77 (37%)	0.048	27 (49%)	41 (39%)	0.017	29 (44%)	36 (34%)	0.115
False Confirmations (%)	20 (17%)	25 (12%)	0.276	7 (13%)	4 (4%)	0.748	13 (20%)	21 (20%)	1.231

Table 8 Correlation Coefficients and *p*-Values for Independent Variables (Pearson above the diagonal; Spearman below the diagonal)

		REGYEAR	*CTE*	*LNMCAP*	*REGIND*	*GROWTH*	*SEO*	*RET_OWN*	*PYRSEARN*	*P_HOR*	*F_HOR*	*NEWS*	*UFC_TOT*	*UWRITER*	*AUDITOR*	*AUDCOM*	*CHAIR*	*INDIR*
REGYEAR	Coeff.		0.047	0.036	0.149	-0.038	-0.12	0.264	-0.073	-0.037	0.148	-0.089	0.107	-0.073	-0.16	0.144	0.036	0.085
	p-value		0.314	0.445	0.001	0.418	0.01	0	0.117	0.428	0.002	0.159	0.022	0.116	0.001	0.002	0.447	0.069
CTE	Coeff.	0.047		-0.3	-0.215	0.044	0.14	0.156	-0.133	0.012	-0.033	-0.192	-0.046	0.051	-0.04	-0.069	0.081	0.083
	p-value	0.314		0	0	0.345	0.003	0.001	0.004	0.79	0.484	0.002	0.323	0.277	0.397	0.139	0.082	0.075
LNMCAP	Coeff.	0.034	-0.288		0.164	-0.04	-0.119	-0.187	0.013	-0.015	-0.023	0.307	0.097	0.014	0.308	0.212	0.019	0.098
	p-value	0.465	0		0	0.389	0.011	0	0.777	0.753	0.624	0	0.037	0.77	0	0	0.684	0.035
REGIND	Coeff.	0.149	-0.215	0.127		-0.052	0.028	-0.189	-0.373	0.143	0.119	0.051	-0.089	-0.204	0.108	-0.073	-0.071	-0.095
	p-value	0.001	0	0.006		0.267	0.544	0	0	0.002	0.012	0.423	0.056	0	0.021	0.119	0.128	0.042
GROWTH	Coeff.	-0.031	0.239	-0.071	-0.186		0.013	0.152	0.073	-0.078	-0.08	-0.054	-0.006	0.026	-0.049	-0.009	0.05	-0.084
	p-value	0.503	0	0.128	0		0.777	0.001	0.116	0.093	0.09	0.39	0.895	0.574	0.294	0.855	0.289	0.073
SEO	Coeff.	-0.12	0.14	-0.132	0.028	-0.04		0.099	-0.072	0.225	-0.025	-0.016	0.081	0.049	0.001	-0.046	0.058	0.022
	p-value	0.01	0.003	0.005	0.544	0.39		0.034	0.124	0	0.598	0.799	0.083	0.294	0.983	0.326	0.212	0.637
RET_OWN	Coeff.	0.28	0.109	-0.129	-0.136	0.237	0.098		0.141	-0.136	0.004	-0.071	0.09	0.015	-0.27	0.127	0.015	0.069
	p-value	0	0.019	0.005	0.004	0	0.036		0.002	0.003	0.94	0.258	0.054	0.755	0	0.006	0.756	0.139
PYRSEARN	Coeff.	-0.117	-0.131	0.046	-0.39	0.167	-0.116	0.092		-0.122	-0.046	0.111	0.121	0.049	-0.01	0.166	0.141	0.115
	p-value	0.012	0.005	0.328	0	0	0.013	0.048		0.009	0.336	0.077	0.009	0.297	0.837	0	0.002	0.014
P_HOR	Coeff.	-0.024	0.017	-0.003	0.134	-0.061	0.226	-0.138	-0.114		-0.001	-0.158	0.327	0.024	-0.086	-0.072	-0.082	-0.037
	p-value	0.607	0.712	0.957	0.004	0.192	0	0.003	0.014		0.977	0.012	0	0.603	0.067	0.124	0.079	0.432
F_HOR	Coeff.	0.148	-0.027	-0.01	0.123	-0.089	-0.024	-0.027	-0.036	-0.006		-0.05	0.038	-0.015	-0.081	-0.009	-0.003	0.015
	p-value	0.002	0.576	0.837	0.01	0.061	0.607	0.57	0.443	0.902		0.438	0.422	0.749	0.089	0.856	0.952	0.747
NEWS	Coeff.	-0.11	-0.225	0.351	0.065	-0.103	-0.022	-0.085	0.12	-0.182	-0.019		-0.088	0.044	0.132	0.047	0.014	-0.012
	p-value	0.08	0	0	0.301	0.102	0.732	0.177	0.057	0.004	0.768		0.163	0.483	0.035	0.46	0.822	0.854
UFC_TOT	Coeff.	0.088	-0.033	0.074	-0.112	-0.001	0.096	0.095	0.173	0.424	0.056	-0.116		0.085	-0.058	0.151	0.094	0.051
	p-value	0.059	0.486	0.114	0.016	0.985	0.04	0.041	0	0	0.239	0.065		0.069	0.211	0.001	0.044	0.272
UWRITER	Coeff.	-0.073	0.051	0.064	-0.204	0.06	0.049	-0.011	0.038	0.036	-0.018	0.027	0.093		0.013	0.009	0.098	-0.086
	p-value	0.116	0.277	0.17	0	0.197	0.294	0.813	0.414	0.444	0.706	0.664	0.046		0.778	0.855	0.036	0.067
AUDITOR	Coeff.	-0.16	-0.04	0.308	0.108	-0.132	0.001	-0.24	0.021	-0.068	-0.062	0.149	-0.057	0.013		0.098	0.086	0.126
	p-value	0.001	0.397	0	0.021	0.005	0.983	0	0.656	0.145	0.195	0.017	0.218	0.778		0.035	0.067	0.007
AUDCOM	Coeff.	0.136	-0.074	0.215	-0.065	0.06	-0.043	0.122	0.228	-0.058	-0.014	0.058	0.128	-0.004	0.11		0.299	0.345
	p-value	0.004	0.115	0	0.161	0.2	0.362	0.009	0	0.216	0.765	0.361	0.006	0.927	0.018		0	0
CHAIR	Coeff.	0.058	0.099	-0.007	-0.088	0.104	0.077	-0.007	0.162	-0.044	0.013	-0.004	0.116	0.103	0.053	0.295		0.36
	p-value	0.212	0.033	0.883	0.061	0.026	0.099	0.884	0	0.342	0.792	0.944	0.013	0.028	0.253	0		0
INDIR	Coeff.	0.083	0.078	0.135	-0.052	-0.085	0.005	0.015	0.093	-0.015	0.029	-0.011	0.022	-0.092	0.141	0.328	0.311	
	p-value	0.074	0.097	0.004	0.267	0.067	0.92	0.742	0.047	0.756	0.548	0.861	0.632	0.049	0.003	0	0	

See Table 6 for variable descriptions.

Table 9
Regression Results – Accuracy of Prospectus Forecasts

PFE_{it} *(or* $PFESIZE_{it}$*)* $= \alpha + \beta_1 REGYEAR_{it} + \beta_2 CTE_{it} + \beta_3 LNMCAP_{it} + + \beta_4 REGIND_{it} + \beta_5 GROWTH_{it} + \beta_6 SEO_{it} + \beta_7 RET\_OWN_{it} + \beta_8 PYRSEARN_{it} + \beta_9 P\_HOR_{it} + \beta_{10} UWRITER_{it} + \beta_{11} AUDITOR_{it} + \beta_{12} AUDCOM_{it} + \beta_{13} CHAIR_{it} + \beta_{14} INDIR_{it} + \varepsilon_{it}$ (1)

Panel A: Prospectus Forecast Error Bias (*PFE*)

Variable	Expected Sign	**All**		**CTE Firms**		**Non-CTE Firms**	
		Coeff.	*t-stat.*	*Coeff.*	*t-stat.*	*Coeff.*	*t-stat.*
Intercept		27.280	2.028**	71.817	1.885**	5.639	2.572**
REGYEAR	-	-2.866	-1.698*	-10.520	-2.029**	0.167	0.440
CTE	+	3.814	2.249**				
LNMCAP	-	-1.068	-1.985**	-2.161	-1.465	-0.346	-3.222***
REGIND	-	-2.113	-2.153**	-5.529	-2.091**	-0.996	-1.991**
GROWTH	+	-0.004	-1.039	-0.023	-1.524	0.000	0.546
SEO	-	-3.003	-1.696*	-12.408	-2.111**	0.393	1.215
RET_OWN	-	-3.931	-1.225	-5.474	-0.806	0.413	0.794
PYRSEARN	-	-0.566	-0.949	-1.874	-0.903	-0.339	-1.627
P_HOR	+	0.014	2.467***	0.046	2.457***	0.003	2.045**
UWRITER	-	1.551	1.712*	8.878	1.993**	0.413	1.253
AUDITOR	-	-2.228	-1.118	-5.198	-1.194	-0.434	-1.082
AUDCOM	-	-0.349	-0.322	-1.062	-0.491	-0.214	-1.054
CHAIR	-	2.107	2.333**	3.939	2.101**	0.311	1.626
INDIR	-	0.276	0.068	-5.866	-0.527	2.309	1.99**
Adj. R^2*/F-stat*		0.047	2.50	0.097	2.45	0.060	2.23
Panel B: Prospectus Forecast Error Size (*PFESIZE*)							
Intercept		26.649	1.984**	73.065	1.921**	4.622	2.161**
REGYEAR	-	-2.724	-1.619	-9.989	-1.933**	0.139	0.377
CTE	+	4.045	2.392**				
LNMCAP	-	-1.031	-1.920**	-2.203	-1.495	-0.290	-2.784***
REGIND	-	-1.967	-2.003**	-5.731	-2.175**	-0.819	-1.644
GROWTH	+	-0.004	-1.058	-0.023	-1.510	0.000	0.379
SEO	-	-3.062	-1.732*	-12.479	-2.127**	0.389	1.227
RET_OWN	-	-3.770	-1.178	-5.287	-0.779	0.509	1.031
PYRSEARN	-	-0.480	-0.806	-1.649	-0.798	-0.273	-1.316
P_HOR	+	0.015	2.515***	0.047	2.513***	0.003	2.075**
UWRITER	-	1.558	1.720*	8.932	2.007**	0.347	1.078
AUDITOR	-	-2.101	-1.057	-4.903	-1.130	-0.456	-1.159
AUDCOM	-	-0.259	-0.240	-0.889	-0.413	-0.187	-0.940
CHAIR	-	2.126	2.357**	3.916	2.107**	0.295	1.628
INDIR	-	-0.187	-0.046	-7.289	-0.656	2.301	2.010**
Adj. R^2*/F-stat*		0.046	2.48	0.0965	2.44	0.0509	2.03
N		460		190		270	

*,**,*** significant at the 0.1,0.05 and 0.01 levels respectively (two-tailed). All t-statistics are calculated using White's (1980) heteroscedasticity-corrected standard errors. In Panel A, *ERROR= PFE*: the prospectus forecast error bias or the relative directional forecast error, measured as the difference between forecasted earnings in the prospectus and the actual reported earnings, scaled by the absolute value of forecasted earnings; In Panel B, *ERROR = PFE Size*: the size of the prospectus forecast error, measured as the absolute value of difference between forecasted earnings in the prospectus and the actual reported earnings, scaled by the absolute value of forecasted earnings; see Table 6 for all other variable descriptions.

Table 10
Regression Results – Accuracy of Final Forecast Revisions

$$FINAL\ FE_{it}\ (or\ FINALFE\_SIZE_{it}) = \alpha + \gamma_1 REGYEAR_{it} + \gamma_2 CTE_{it} + \gamma_3 LNMCAP_{it} + \gamma_4 REGIND_{it} + \gamma_5 GROWTH_{it} + \gamma_6 SEO_{it} + \gamma_7 RET\_OWN_{it} + \gamma_8 PYRSEARN_{it} + \gamma_9 F\_HOR_{it} + \gamma_{10} NEWS_{it} + \gamma_{11} UFC\_TOT_{it} + \gamma_{12} AUDITOR_{it} + \gamma_{13} AUDCOM_{it} + \gamma_{14} CHAIR_{it} + \gamma_{15} INDIR_{it} + \varepsilon_{it} \quad (2)$$

Panel A: Final Forecast Error Bias (*FINALFE*)

Variable	Expected Sign	All		CTE Firms		Non-CTE Firms	
		Coeff.	*t-stat.*	*Coeff.*	*t-stat.*	*Coeff.*	*t-stat.*
Intercept		10.581	1.908*	48.073	1.789*	1.094	1.502
REGYEAR	-	-2.328	-1.777*	-6.129	-1.741*	-0.109	-0.671
CTE	+	1.893	1.334				
LNMCAP	-	-0.332	-1.855*	-1.669	-1.568	-0.103	-1.948*
REGIND	-	-0.934	-1.129	-3.205	-1.512	-0.183	-0.752
GROWTH	+	0.001	0.123	0.007	0.468	0.000	-0.106
SEO	-	-1.730	-1.234	-5.385	-1.525	0.453	2.418***
RET_OWN	-	-3.807	-1.109	-15.330	-1.335	0.400	0.897
PYRSEARN	-	0.248	0.481	0.535	0.285	0.079	1.427
F_HOR	+	0.004	1.920*	0.002	0.628	0.003	1.486
NEWS	-	-2.280	-2.402**	-1.990	-1.300	-0.782	-5.278***
UFC_TOT	-	-0.655	-2.173**	-2.012	-1.965**	-0.129	-2.233**
AUDITOR	-	-0.353	-0.192	-0.342	-0.088	0.206	1.286
AUDCOM	-	-1.428	-0.935	-3.210	-1.051	-0.124	-1.029
CHAIR	-	1.483	1.187	3.101	0.907	0.318	1.229
INDIR	-	0.296	0.073	-4.408	-0.429	0.218	0.654
Adj. R^2/F-stat		0.0209	1.65	0.0370	1.52	0.1898	5.50
Panel B: Final Forecast Error Size (*FINALFE_ SIZE*)							
Intercept		10.253	1.846*	47.862	1.783*	0.853	1.172
REGYEAR	-	-2.320	-1.773*	-6.168	-1.752*	-0.043	-0.271
CTE	+	2.091	1.476				
LNMCAP	-	-0.322	-1.789*	-1.656	-1.557	-0.094	-1.789*
REGIND	-	-0.818	-0.987	-3.035	-1.422	-0.116	-0.480
GROWTH	+	0.001	0.143	0.007	0.496	0.000	-0.467
SEO	-	-1.728	-1.234	-5.462	-1.550	0.492	2.687***
RET_OWN	-	-3.994	-1.167	-16.081	-1.409	0.360	0.814
PYRSEARN	-	0.264	0.513	0.573	0.305	0.078	1.365
F_HOR	+	0.004	1.918*	0.002	0.648	0.003	1.507
NEWS	-	-1.954	-2.060**	-1.484	-0.967	-0.503	-3.503***
UFC_TOT	-	-0.635	-2.140**	-1.920	-1.912**	-0.144	-2.535**
AUDITOR	-	-0.353	-0.193	-0.342	-0.088	0.205	1.302
AUDCOM	-	-1.413	-0.926	-3.237	-1.061	-0.078	-0.660
CHAIR	-	1.467	1.174	3.125	0.912	0.314	1.223
INDIR	-	0.512	0.125	-3.894	-0.38	0.292	0.868
Adj. R^2/F-stat		0.0193	1.60	0.0366	1.51	0.1637	4.76
N		460		190		270	

*,**,*** significant at the 0.1,0.05 and 0.01 levels respectively (two-tailed). All t-statistics are calculated using White's (1980) heteroscedasticity-corrected standard errors. *FINALFE* = final forecast error bias or the relative directional forecast error, measured as the difference between the last earnings figure forecasted during the forecast period and the actual reported earnings, scaled by the absolute value of forecasted earnings; *FINALFE SIZE* = final forecast error size, measured as the absolute value of the difference between the last earnings figure forecasted during the forecast period and the actual reported earnings, scaled by the absolute value of forecasted earnings; *NEWS* is a binary variable taking the value of 1 if actual earnings meet or exceed the prospectus forecast (good news outcome), and 0 otherwise (bad news outcome). See Table 6 for all other variable descriptions.

Notes

[1] The Australian Securities Exchange was named the Australian Stock Exchange during the period of this study.
[2] Our focus in this study is on IPO forecast accuracy and not IPO forecast frequency. However, in separate analysis we find IPO forecast frequency has significantly declined in the post-*CLERP Act* period; thus confirming the findings of Chapple et al. (2005).
[3]The fundraising provisions in the *Corporations Act* 2001are not materially different from the old *Corporations Law.*
[4] The specific disclosures are: the terms and conditions of the offer; the interests of the directors, proposed directors, advisors, promoters and underwriters of the company; the fees and benefits to the directors, proposed directors and advisors of the company; the admission of the securities or the application for the admission of the securities to quotation on a financial market; the expiry date of the prospectus; and the fact that the prospectus has been lodged with ASIC.
[5] In PN67, prospective financial information included forecasts and projections. Projections are based on hypothetical assumptions and unlike forecasts do not have to be based on reasonable grounds. In contrast, PS170 does not allow for the inclusion of projections. Thus for simplicity, the term prospective financial information is henceforth referred to as forecasts.
[6] PN67 uses the term "reasonable basis".
[7] In June 1999 the NYSE changed its rules to allow very large firms (with market capitalisation over $1 billion) to enter without the three-year history of profitability requirement (Klein and Mohanram 2005).
[8] The ASX's 'profit test' required firms to have profits of at least $1 million over the previous three years (LR 1.2.4) and $400,000 or more in profit during the year prior to listing (LR 1.2.5).
[9] LR1.3.2(b) also applies to firms that are already listed on the ASX but change their business activities. Under LR11.1.3, entities which change their activities and have capital raising which results in them holding more that 50% of assets in cash, have to satisfy the requirements of LR1.2.3(b) as if they are applying for admission. These entities are in effect CTEs and are subject to the same listing rules as newly-listed CTEs. A common example from the dot com boom-period is mining companies changing their activities to high technology businesses.
[10] LR4.7B came into effect on 31 March 2000. The format of the quarterly cash flow report is prescribed in Appendix 4C of the Listing Rules. Under LR4.7B the ASX can extend the CTE quarterly disclosure provisions to certain non-CTE entities 'as if' they are newly listed following certain events such as a major change in business activities.
[11] In Australia only CTEs and mining exploration companies are required to provide quarterly reports.
[12] The joint surveillance followed ASIC's Guidance and Discussion Paper **"**Heard it on the Grapevine" released in November 1999 which was aimed at improving the effectiveness of the continuous disclosure regime.
[13] Listing rule 3.1 has certain carve-out provisions, which principally relate to not requiring disclosure of proprietary information and information about highly uncertain events.
[14] Chapter 6CA (s674-678) of the *Corporations Act* replaced s1001 and s1005 of the *Corporations Law* on 15 July 2001, and the only change to the continuous disclosure provisions is the introduction of s678, which allows for the application of the Criminal Code to continuous disclosure contraventions.
[15] For example, Baginski, Hassell and Kimborough (2002) report that in the less-litigious Canadian environment, firms make more frequent earnings forecasts containing good news compared to their US counterparts.
[16] This argument is consistent with the growing body of international evidence showing the effectiveness of corporate regulation needs to be considered jointly with enforcement mechanisms. For example, Bhattacharya and Daour (2002) show that insider trading laws are not effective in reducing the cost of capital in a country until after the first prosecution.
[17] This is the equivalent of the forecast horizon variable used in this study.
[18] Consistent with the findings of Gallery, Gallery and Hsu (2002), sensitivity analysis reveals that this industry dichotomy is robust to alternative specifications.
[19] The SPPR database was sourced from the Centre for Research in Finance at the (then) Australian Graduate School of Management, University of New South Wales.
[20] For example, Global Seafood Limited lodged the IPO prospectus on 8 September 1999 and released its first preliminary report to the public on 15 September 1999, the same day it listed on the ASX.
[21] Earnings represent NPAT, EBIT, or EBITDA, depending on the level of earnings forecasted in the prospectus. The closest available level of earnings to NPAT is used as a basis for measuring prospectus forecast error. In contrast to Chapple et al. (2005), the denominator is the absolute value of the forecasted earnings rather than the forecasted earnings to eliminate the effect of a reversal in direction caused by a negative denominator. Our forecast error measurement method is consistent with prior research (see Cheng and Firth,

2000). Following Cheung et al, (2000) and How and Yeo (2001) we also use issue size as the denominator and obtain results (not reported) that are qualitatively similar.

[22] Beekes and Brown (2006) provide Australian evidence that better governed firms make more informative (price-sensitive) disclosures.

[23] In Model 2 *LNMCAP*, *GROWTH* and *RET_OWN* are measured at balance date of the corresponding forecast period.

[24] The explanatory power of the Table 9 models (adjusted R^2) are lower than those in Chapple et al. (2005) which can be at least partly attributable to the inclusion of all our explanatory variables in our models. We keep all non-significant variables in the model because our theoretical arguments support their inclusion and we wanted to show that other factors did not impact on REGYEAR and CTE – our variables of interest.

[25] Although the requirement for Appendix 4C reporting, via ASX Listing Rule 4.7B, was only established on 31 March 2000, the IPO firms that listed in 1998, 1999, and early 2000 who later became subject to this requirement were coded as CTE firms in order to capture the differences between the forecasting characteristics of all firms that fall under the CTE category before and after Listing Rule 4.7B was enacted by the ASX.